

A Study on Intestinal Obstruction

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ABSTRACT

Background: Intestinal obstruction is common surgical emergency and because of its serious nature it demands early diagnosis and speedy relief (1). The prognosis has improved in the past 2 decades because of availability of diagnostic methods and antibiotics and surgical techniques. Aim of the study: We have conducted this study, to study the epidemiology, symptoms and signs and of diagnosis and treatment of intestinal obstruction. **Methods:** This study was conducted in the patients who are admitted in our hospital between December 2014 August 2015 nearly 20 months. **Results:** In our study the majority of cases of intestinal obstruction were 10-20yr(60.35%) and in 20-40yrs age group 25.20% and in above 40years age group it is 14.45%. **Conclusion:** The majority of the patients were in young age group and male to female ratio is 4.2:1 Abdominal distention was the commonest symptom in this study.

Keywords: Intestinal obstruction, complications, sepsis, mortality.

INTRODUCTION

Intestinal obstruction is common surgical emergency and because of its serious nature it demands early diagnostic and speedy relief. Because of the availability of diagnosis methods; higher antibiotics, surgical techniques and pre and post-operative techniques the prognosis has been improved in the past 2 decades.

Intestinal obstruction may be classified into

- 1) Dynamic and 2) Adynamic.
- In Dynamic obstruction peristalsis is working against obstructing agent. May be gall stone, malignant stricture.
- In A dynamic obstruction peristalsis ceases no true propulsive wave occurs as in paralytic ileus.^[1]

The intestine above the point of obstruction endeavors at the outset to over come the obstruction by vigorous peristalsis. The intestine below the point of obstruction exhibits normal peristalsis.

The cause of intestinal obstruction are varies from area to area and country to country.^[3,4]

In obstruction, absorption from gut is retarded but excretion of water and electrolytes into lumen persists and even may increases. Depravation of water and electrolytes may be due to 1) Vomiting 2) Defective absorption and 3) Sequestration in lumen bowel.^[5]

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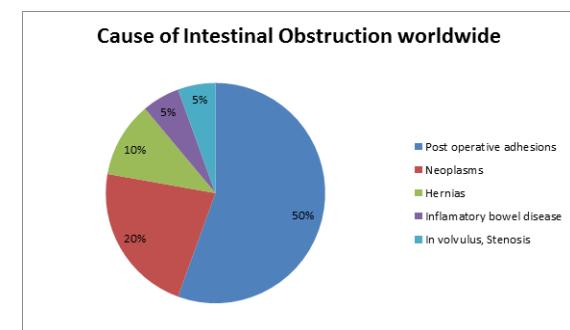
Strangulations of bowel occurs when it is trapped by hernia or band or involved in volvulus or intussusception in such a way that its blood supply is progressively interfered with mesenteric vascular occlusion alone give rise to a gangrene one without mechanical obstruction.^[6]

Acute intestinal obstruction account for 1.3% of all hospitalized admissions worldwide and ¼ are emergency admissions. 80% cases involves. The small bowel and 1/3 have significant ischemia. Mortality rate for patients with strangulation who are operated with in 24hr is 8%.^[6]

Common causes of Intestinal obstruction are Adhesions, Hernias, carcinomas, Congenital like malrotation, atresia, stenosis and inflammatory bowel disease

Post-operative adhesions	>50%
Neoplasms	20%
Hernias	10%
Inflammatory bowel disease	5%
In volvulus, Stenosis	5%

Cause of Intestinal Obstruction worldwide



Most common carcinomas which can cause obstruction are ovary, stomach and colon.

Most common symptoms are abdominal pain, abdominal distention, Vomiting's and constipation. More intra luminal fluid accumulates in patients with distal obstruction which typically leads to greater distention, more discomfort and delayed emesis patients with ileus or pseudo obstruction may have signs and symptoms similar to those of small bowel obstruction.^[7-9]

X-ray abdomen in erect position demonstrates dilated bowel loops with multiple air fluid levels. In some conditions like pyloric stenosis ultrasound abdomen plays a role in diagnosing intestinal obstruction.^[10]

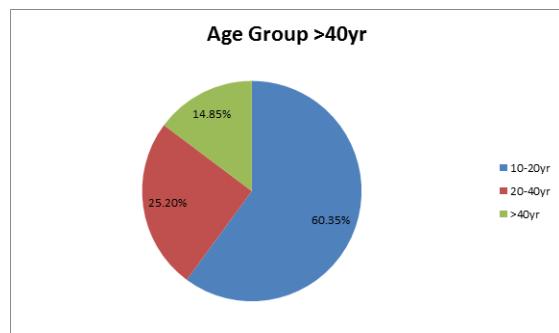
MATERIALS AND METHODS

This study was conducted for 20 months between 2014-2015. We have conducted this study on 50 Patients. The age group is between 10 years to 50 years.

RESULTS

Majority cases are in age group is 10-20 years (60.35%) cases were 30 is no. and 20-40 years it is (25.20%) no is 12 patients and above 40 years it is (14.85%) no is 8.

Age Group	Cases(%)
10-20yr	30(60.35%)
20-40yr	12(25.20%)
>40yr	8(14.85%)



DISCUSSION

In our study abdominal distention was most common symptom 58.56% followed by vomiting 50.25%, abdominal pain was 42.5% and constipation is 38.75% patients.

The study conducted by Momia et al was observed that vomiting's were most common symptom (72.25%). Sometimes the clinical features may vary depending up on the cause of obstruction patients with more proximal obstruction commonly presents with less abdominal distention but more profoult vomiting's.

Diagnosis can be made by plain X-ray erect abdomen where "stair casing" pattern of dilated and

air and multiple fluid levels in bowel loops Agas filled "coffee bean" shaped dilated shadow may be seen in patients with volvulus.

CT is the most commonly used imaging modality. The sensitivity for detecting bowel obstruction is approximately 95%. CT imaging with enteral IV contrast can also identify ischemia.^[11]

Most of the patients with intestinal obstruction were required operative procedures 82.45% 41 patients were managed medically.

In Acute colonic pseudo- obstruction 1(Ogilvie Syndrome) Spontaneous massive dilation of the cecum and proximal colon may occur. Progressive caecal dilation may lead of spontaneous perforation. Early detection and management are important to reduce morbidity. Colonic pseudo obstruction is most commonly detected in post-surgical patients and in medical patients with respiratory failure. Metabolic imbalance malignancy, myocardial infarction, heart failure pancreatitis or recent neurological event stroke.^[13] Most common symptoms is abdominal distention.

Patients with tonic megacolon presents with fever, dehydration, abdominal pain leukocytosis and bloody diarrhea small bowel obstruction may develop secondary to active inflammation or chronic fibrotic stricture and if often acutely precipitated by dietary indiscretion.

CONCLUSION

In our study majority patients were in young age group most common cause is Adhesions. The mortality in our study was 11.5% and early diagnosis and management can decreases the mortality and morbidity.

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